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**Solar Solutions** 

# The Klinic KUBE



# Solar Powered Vaccine & Medical Supply Storage

# The SOLAR powered KLINIC KUBE

designed to provide;

- Safe Vaccine Storage
- Medical Supply Storage,
- Safe Food
- Emergency Portable Lighting
- Water Purification
- Charging of Appliances

In the remotest and/or disaster stricken areas on our planet.

# The KLINIC KUBE





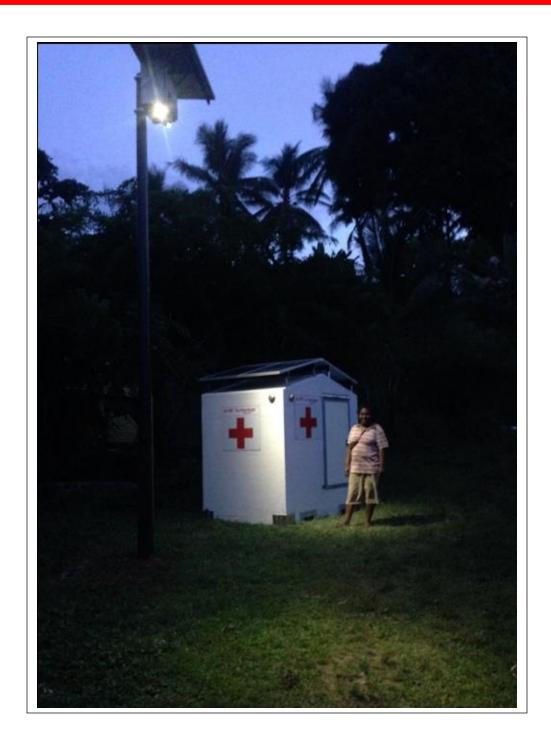


# **Installation: 30 Minutes**

# Place Klinic KUBE into position Simply;

- Secure ground stakes
- And it works

No ongoing maintenance required.

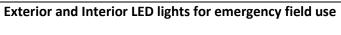


Head Nurse Masira at East Cape Village in Alotau, Papua New Guinea enjoys both KUBE lighting and safe storage of vaccines and medical supplies from the KLINIC KUBE enabling her to administer health aid to villagers.





Klinic KUBE in East Cape Village PNG







# **Exterior LED lights**

# Interior racking and freezed dried food storage





Installation in East Cape Village Papua New Guinea

Simple stake system to secure in high winds



Interior emergency backup lighting/Vaccine Fridge



Battery and Control box with USB port for charging laptops and phones for medical uses





Shelving for medical supplies and freeze dried food

Rubber mat flooring easily removed and cleaned

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# 1.0 KLINIC KUBE Technology™

KLINIC KUBE Technology<sup>™</sup>- allows for the safe and long term storage of vaccines, medical supplies and medicines, food, water purification and solar lighting in the most remote and/or disaster stricken areas of the world utilizing solar power.

The benefits of the **KLINIC-KUBE™** include:

- A <u>World Health Organisation (WHO)</u> rated medical refrigeration unit which maintains vaccines and medicines at critical temperatures for up to 4 days without power
- Provides additional storage for bandages, basic medicines and first aid equipment
- Safe lockable storage for medications/syringes etc
- Dispensable retainers for used syringes
- Provides freeze dried food with an indefinite shelf life (and over a year once opened) aiding in nutrition for sick people, expectant mothers and children

KLINIC KUBE Technology™ is designed to be portable via 4 wheel drive or Helicopter to the remotest regions on the planet



# KUBEs in production and testing in Wyoming, USA, Head Quarters





KLINIC KUBE in production, DOME KRB Factory, USA.

Installation of Vaccine Fridge into KLINIC KUBE KUBE



Build and testing portion of KUBE Technology Factory



Final Product (New Model)

# 2.0 Product Features- "THE BEST AVAILABLE PRODUCTS ARE UTILISED"

# **VACCINE STORAGE:**

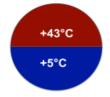
The heart and soul of the KLINIC KUBE is the only direct solar powered (no batteries) World Health Organization (WHO) rated vaccine storage system in the world. Produced by Sundanzer this product is **Capable of vaccine storage without power/sunlight for 3.5 days in 110F/43C direct sunlight!** 

# Sun Danzer



# Direct-Drive Battery-Free Solar Vaccine Refrigerator

W.H.O. Pre-Qualified



#### Features:

- 54.5 liters vaccine storage capacity
- · Meets WHO /PQS/E003/RFo5-VP.2 standard
- · Rated for Hot Zone- 43°C
- Requires <u>no</u> battery
- · Cabinet contains 110 mm of insulation.
- External digital temperature display
- Lock

#### Specifications:

- External Dimensions: 88 x 96.5 x 71 cm (HxWxL)
- · 60 liters gross volume
- · Refrigerant: R134a
- Autonomy at 43°C: 83.5 hours
- Autonomy at 32°C: 116 hours
- Energy Source: Nominal 12VDC solar electric array
- Accessories: 2 vaccine storage baskets (stackable), manual, key.





# **Water Purification:**

- Diarrhea is the second leading cause of death among children under five in the world.
- Around 1.5 million deaths each year nearly one in five are caused by diarrhea. It kills more children than malaria, AIDS, and measles combined.

# The Katadyn Expedition is the world's leading manual water purification system.

- Produces 4 litres of clean water per minute.
- Kills all contaminants to 99.8%
- Eradicates all bacteria causing diarrhea
- Filters last up to 110,000 litres

The filter is built to eliminate micro-organisms such as bacteria, protozoa, cysts, algae, spores, viruses and sediments greater than greater than 0.2 microns(0.0002 mm).

This effectively eliminates microbiological contaminants to the U.S. EPA standards for filtered water



#### **FOOD STORAGE SUPPLIED:**

KLINIC KUBEs are stocked with Thrive Freeze Dried Food produced by Shelfreliance, Utah, USA. This is the best food storage system available. In times of disaster or illness healthy and safe food supplies are as vital as medical supplies.

 Provides freeze dried food with an indefinite shelf life (and over a year once opened) aiding in nutrition for sick people, expectant mothers and children

Thrive foods are packaged by Shelfreliance. With freeze drying, most of the Thrive foods can last up to 25 years. As opposed to dehydrated foods, Thrive freeze dried foods retain 99% of vitamins and minerals, and texture.



#### **POWER STORAGE:**

Lithionics™ lithium batteries are the world leader in design and function. We install a 12 volt 20Amp Hour battery for lighting purposes.

Lithionics™ battery features include:

- 4 times longer power provided than lead acid
- 3 to 4 times longer life span (estimated 10 + years)
- 3.5 time faster recharging capabilities than lead acid
- Lithionics™ have the only patent on individual cell variation charging and over charging control features
- Only environmentally rated battery in the world for disposal
- Only battery rated and approved for air freight
- Even power discharge for 90% of battery capacity



#### **EXTERIOR LIGHTING:**

The KLINIC KUBE has four waterproof, shock proof, 9 watt LED lights installed. Two internal lights provide for shadow free lighting within the KLINIC KUBE. We install two lights on the external side of the KLINIC KUBE to provide much needed lighting in remote or disaster situation so that medical services can be performed without additional power support.



# **Emergency Portable Solar lighting:**

SUNJACK solar systems are the most powerful, highest performing and compact units in the world today. Each Klinic KUBE comes with one 20 Watt Sunjack unit and two LightStick units for portable lighting and charging for any device.

This ensures lighting in any emergency situation and charging of laptops, ipads, phones etc for communication and internet access in the remotest locations or emergency situations throughout Papua New Guinea.



The 20 Watt SunJack with 2 Batteries, will power 4 lights and/or charge appliances



#### 3.0 Klinic KUBE Statistics

# Klinic Kube

W.H.O. pre-qualified vaccine storage

54.5 Lliters-14.3 gallon of storage capacity

Vaccine fridge does not use or need a battery

83 hours of autonomy

Safe vaccine storage range 35-46 degrees F.

Unit will heat/cool to proper range

Senses inside and outside temperatures

360 Watts of solar power

Independently wired to power the vaccine refrigerator 1st

Triage lights last 12 hours

All systems on the battery will last 10 hours

Low voltage disconnect maintains solar controller

20amp hour lithium ion battery

2 weeks of standby with no solar

Fully recharged in 3 hours on a clear day (100,000 lux)

Fully recharged in 5 ½ hours on an overcast day (40,000lux)

Anti-microbial paint and humidistat to keep as sanitary as possible

Stainless steel shelving with clear bins for aid workers

1998- 6.1 million people died from preventable/curable diseases most of them in tropical counties

2008-164,000 people, mostly children under 5 years of age died from measles

Vaccine and safe injection equipment cost LESS THEN 1 U.S. DOLLAR

# **UN Millennium Development Goals**

KUBE Technology™ is in line with the UN's Millennium Development Goals:

The 8 Millennium Development Goals

















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THANK YOU FOR YOUR CONSIDERATION OF KLINIC KUBES FOR A SOLUTON TO THE NEEDS FOR VACCINE/MEDICAL SUPPLIES STORAGE IN REMOTE/DISASTER SITUATIONS.